

System Specifications

Features

This LCD TV was designed with the user in mind. Here are just a few of its many features:

LCD Panel

- Max. resolution: 1366 x 768
- 16 CCFTs Backlight system
- Display area: 31.5 inches diagonal
- Display color: 16.7 M colors
- Input Signal: 1-ch LVDS
- Contrast ratio: 800:1 (Typical)
- Brightness: 500 Cd/m² (Typical)
- Response Time: 24 ms
- Viewing angle: 85° (L) / 85° (R), 85° (U) / 85° (D)

I/O functions

- 21 pin Euro-SCART (RGB) for Video, S-Video, R.G.B. and Audio
- 21 pin Euro-SCART (YUV / RGB) for Video, S-Video, YPbPr, YCbCr, RGB and Audio
- RCA jack (YUV and CVBS) for YPbPr, YCbCr, Video and Audio
- S-Din for S-Video
- 15 pin D-Sub for VGA
- 24 pin DVI / HDCP for DVI-D
- DIN45325 (IEC169-2) Terminal for TV / CATV input
- 3.5 mm Earphone jack for Audio Line input
- 3.5 mm Earphone jack for Audio Line output

Video Functions

- Support PAL / NTSC / SECAM video format
- Support 480i/576i, 480p/576p, 1080i and 720p format
- Build in Teletext functions
- Build in Dynamic adaptive smoothing filter
- Build in Dynamic temporal frame-filtering Noise Reduction

- Build in Dynamic motion and edge adaptive De-interlacing
- Film mode 3:2 & 2:2 pull down
- Screen display model 16:9 / 4:3 / panorama / zoom / PIP / POP

Mechanical

- Swivel: 40° (R: 20°, L: 20°)
- VESA mounting holes

Compatibility

Multi-Sound system

- NICAM
- FM Stereo (A2)

Power Source

- Input voltage: 90 ~ 264 V, 47 ~ 63 Hz
- Input current: 2.3 A
- Power consumption: 210 Watts
- Stand-by: 5 Watts Max.

Remote controllers

- Multi-function remote controller

Speaker

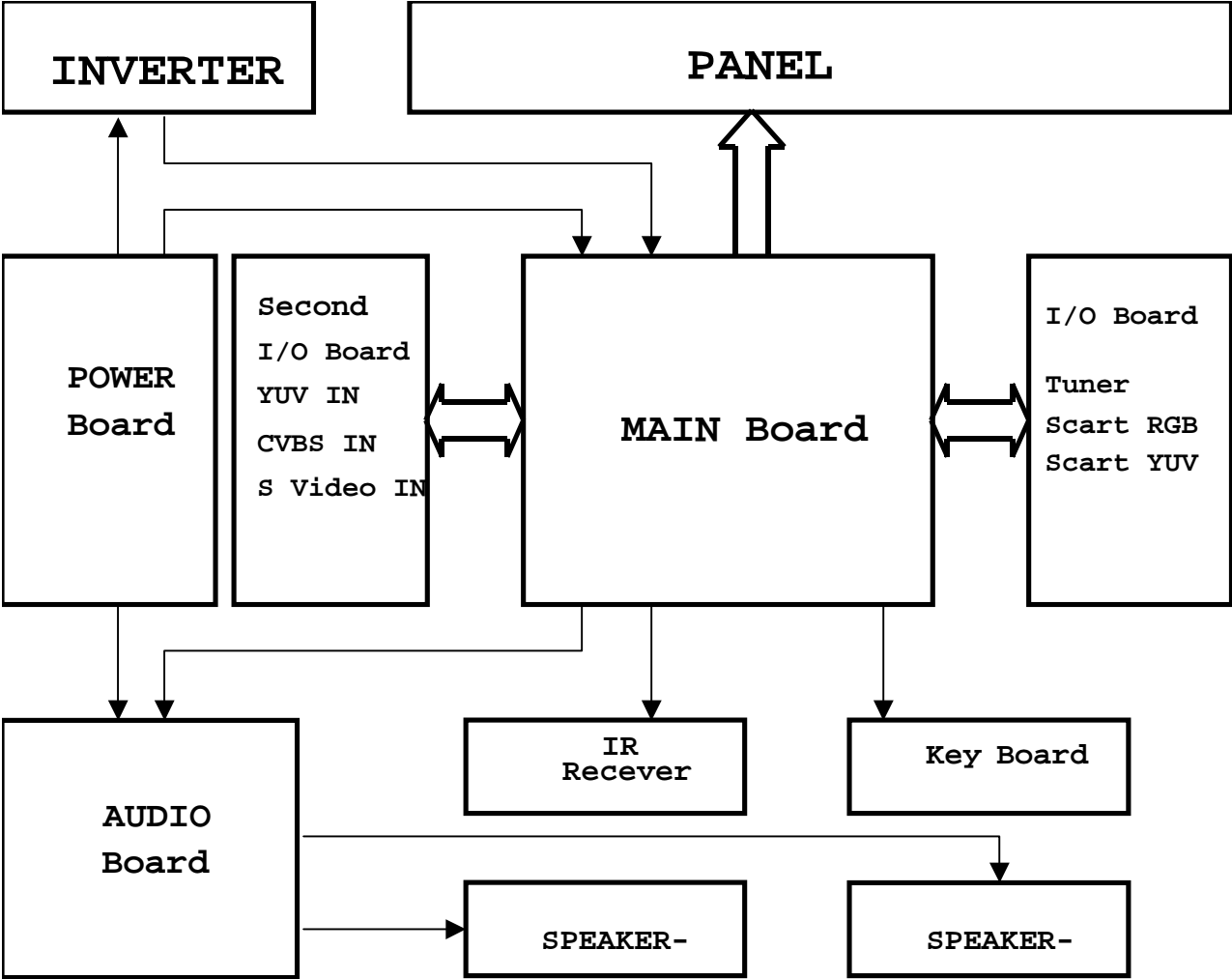
- Internal speaker: 10 W x 2 stereo, volume adjustable

Others

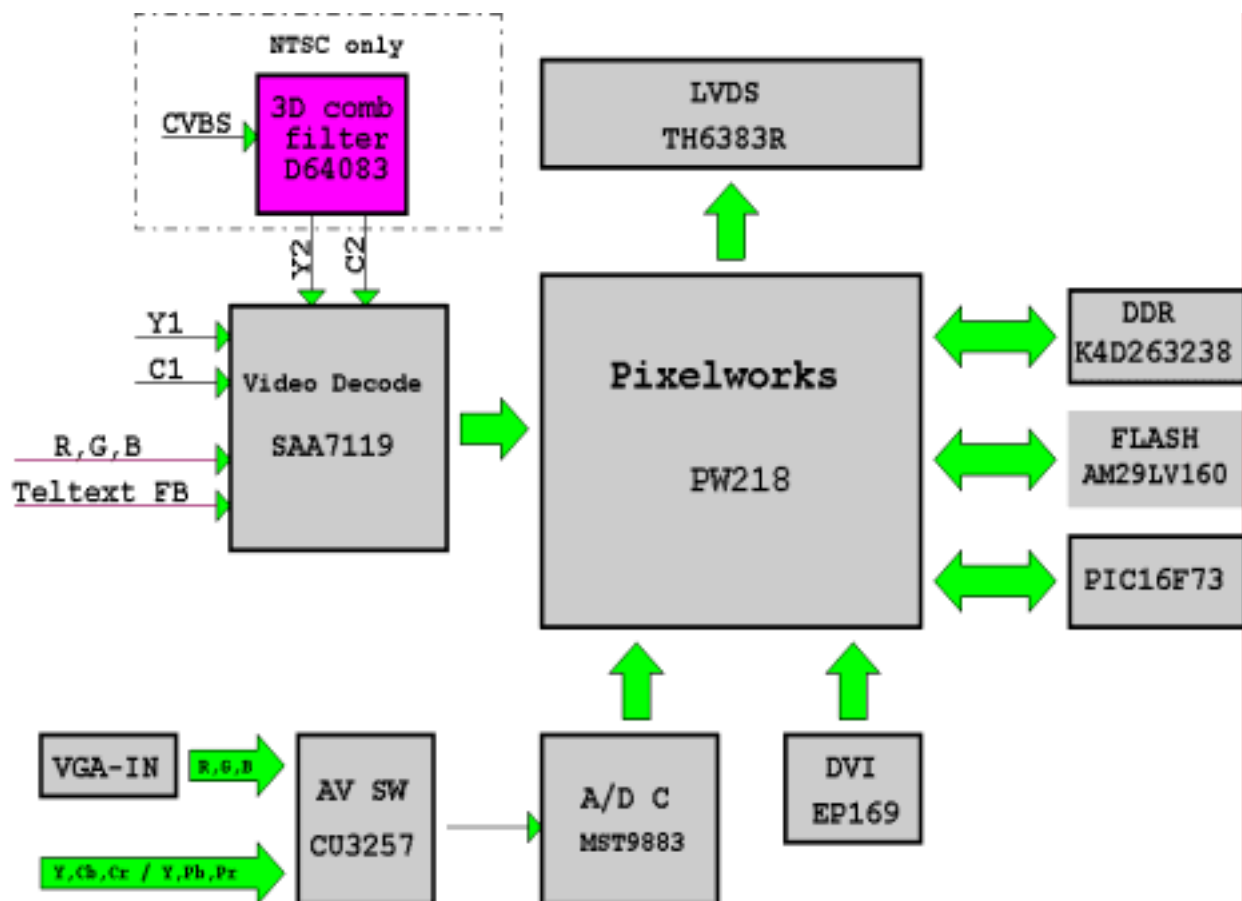
- On screen display adjustment function
ISP (In System Programming) function available for revising driver easily

Block Diagram

System Block & Wiring Diagram



LCD Main Board Block Diagram

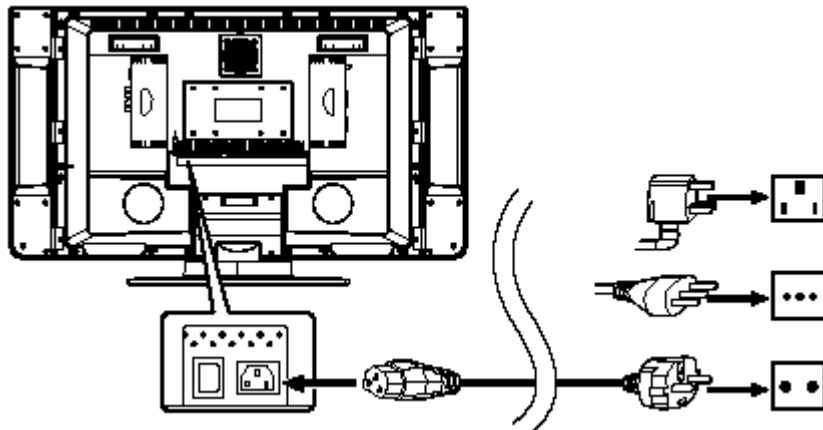


Main Board Block Diagram

Basic Connection

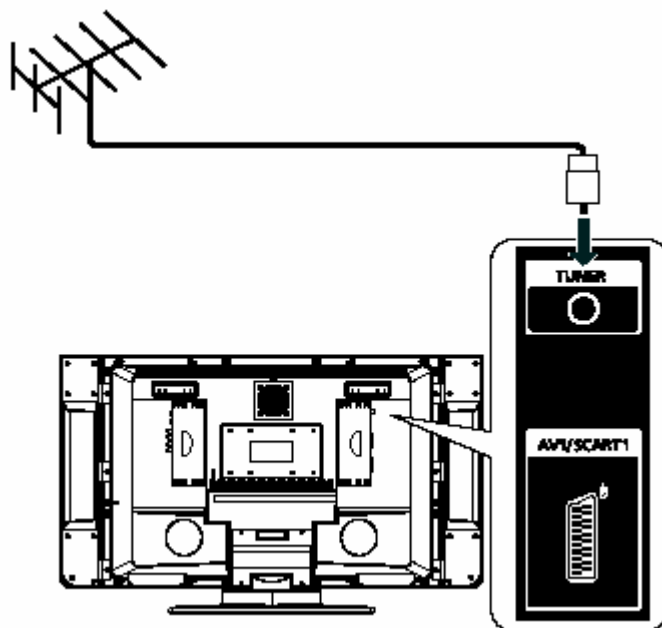
Connecting the power cord

1. Plug the AC cord into the AC input on the back of the set.
2. Connect the male plug to the wall outlet as shown.



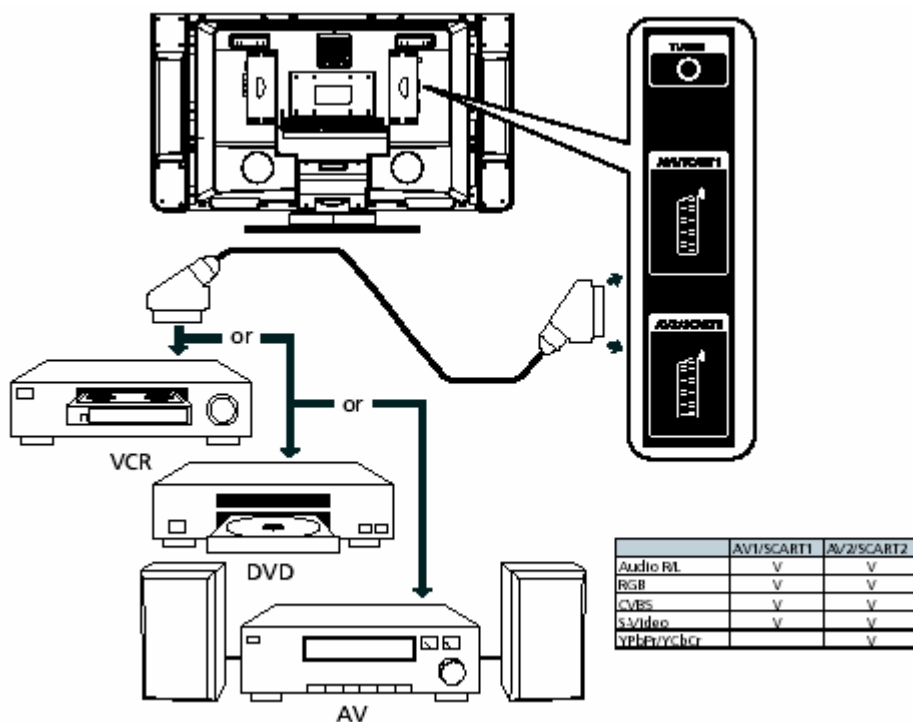
Connecting an antenna

Plug the outdoor antenna cable lead-into the antenna terminal on the back of the TV set as shown.



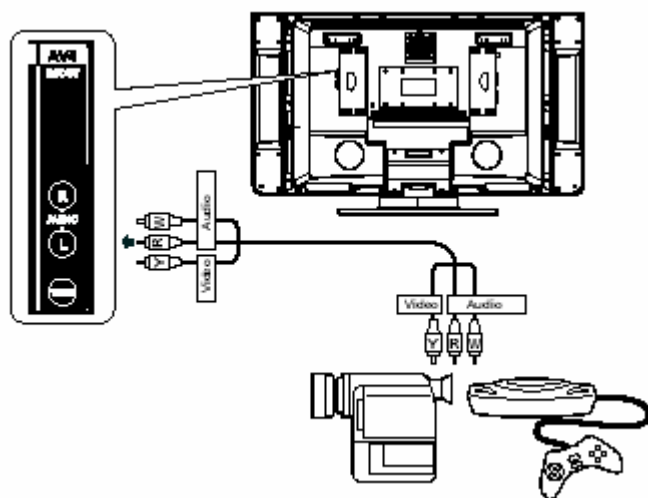
Connecting DVD/VCR/AV equipment

Connect the SCART cable to the SCART port as shown below.



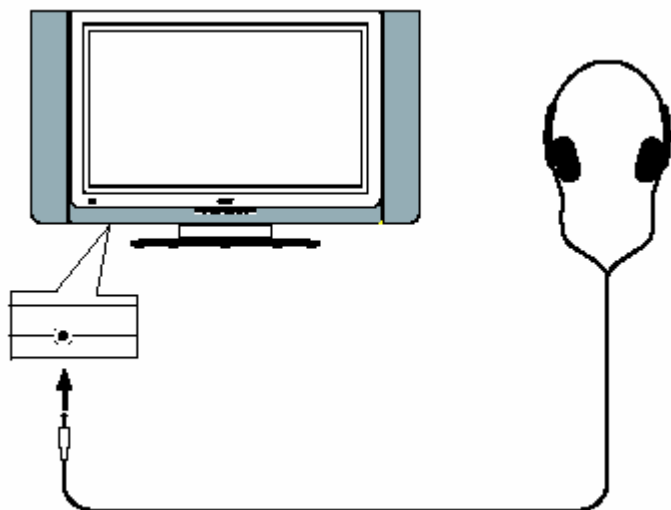
Connecting a camera, camcorder or video game

Connect your camera or camcorder to the Video/Audio ports on the bottom of the TV set as shown below.



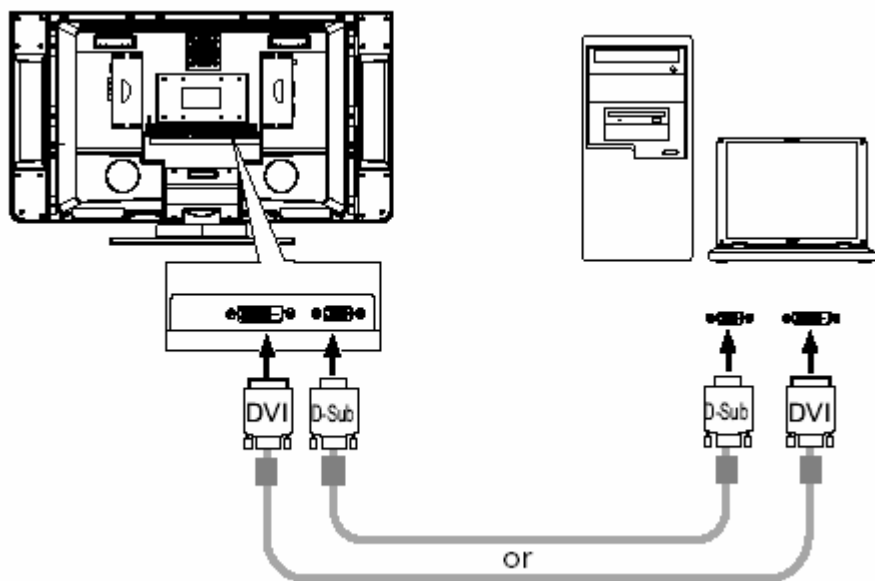
Connecting headphones

Connect your headphones to the headphone input port on the bottom of the TV set as shown below.



Connecting a PC or Notebook

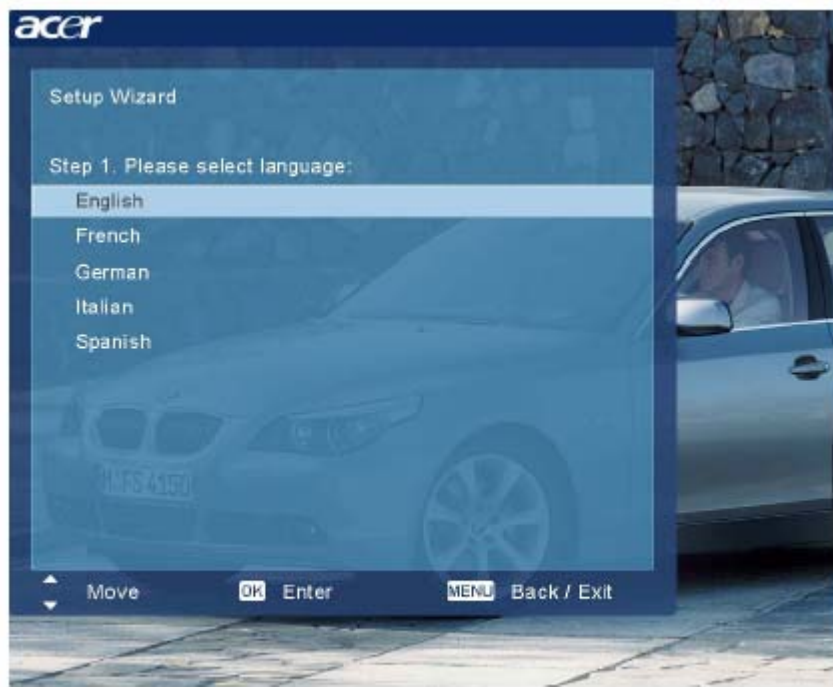
Connect your PC or notebook to the D-Sub or DVI ports on the bottom of the TV set as shown below.



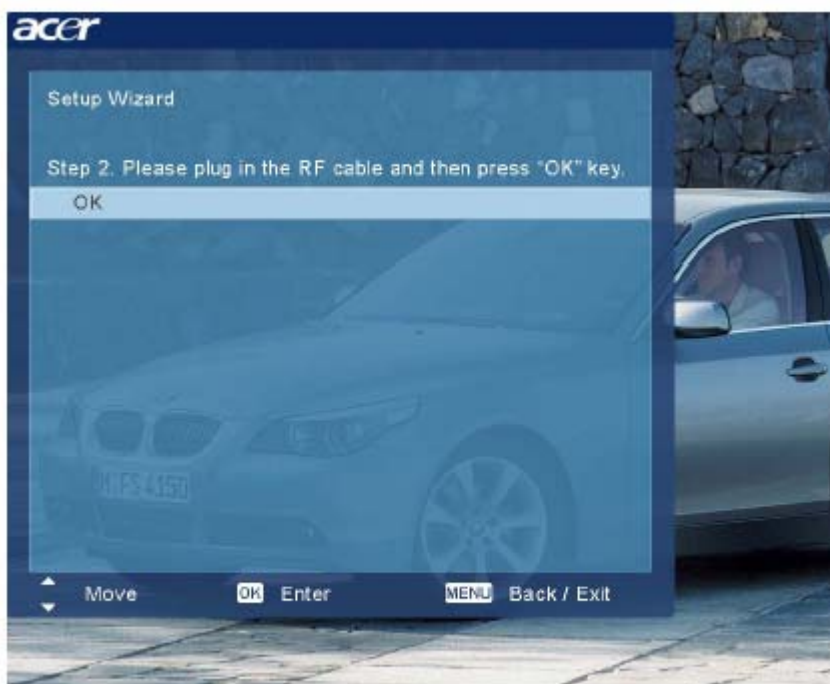
OSD(On Screen Display)

Scanning the channels

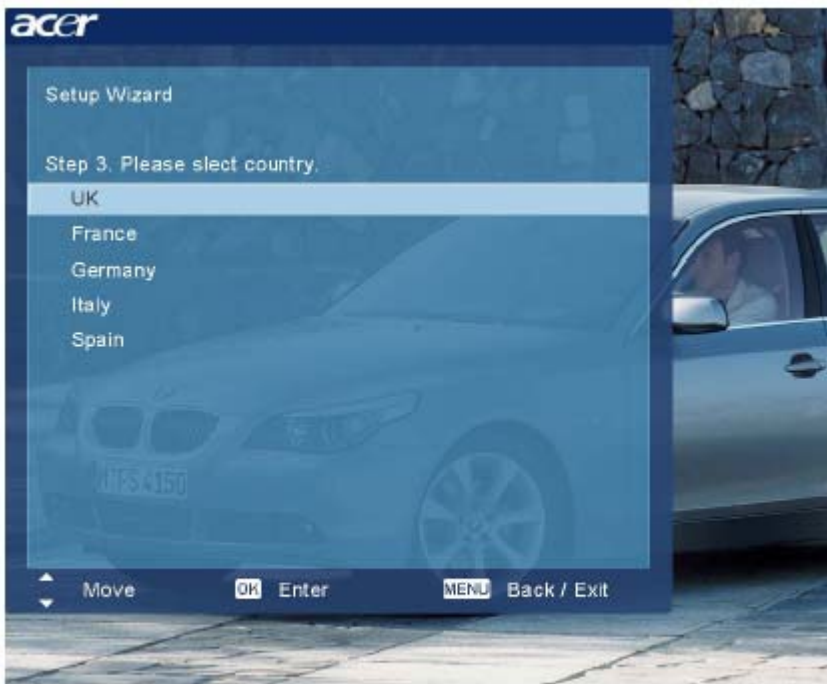
First step: Ask user to select the language of OSD.



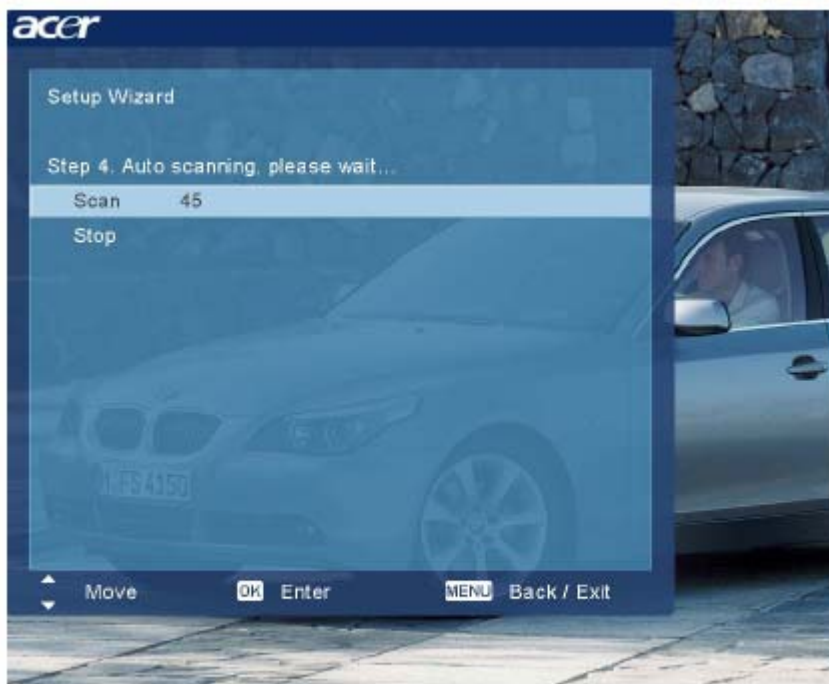
Second step: Ask user to connect the RF cable to the TV.



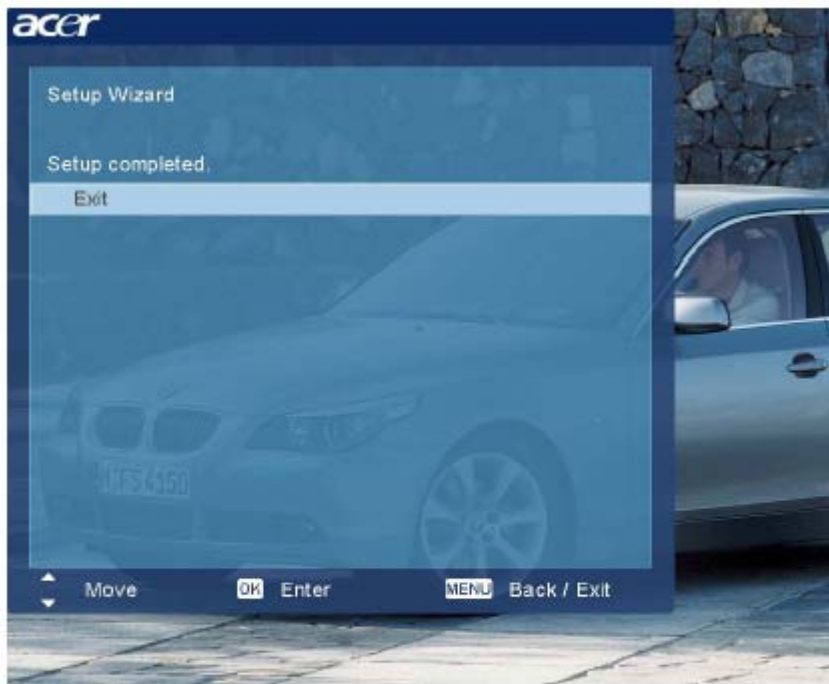
Third step: Ask user to select the country.



Fourth step: System start to scan all available channels.

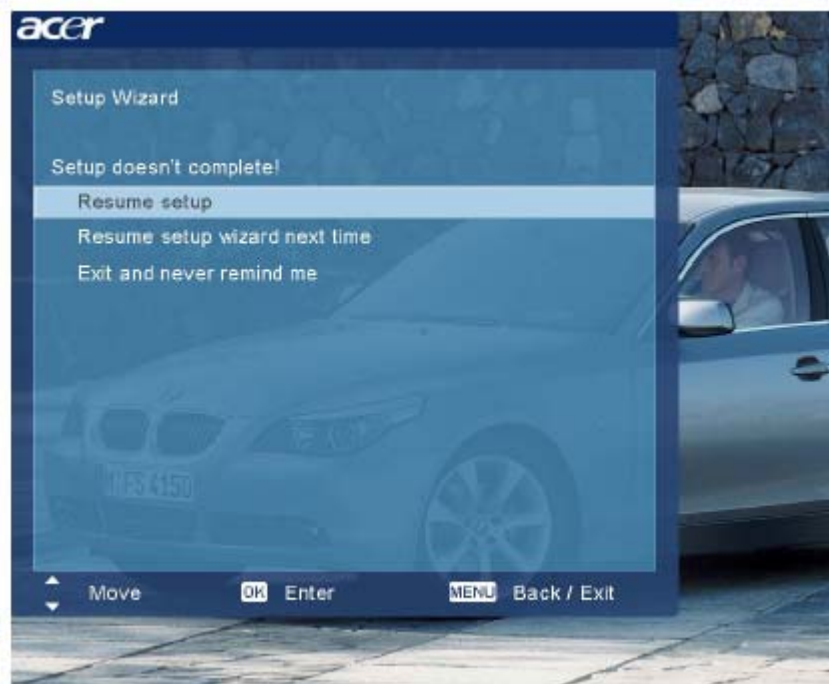


Fifth step: Tell user setup is complete and ask user to leave.



If user wants to leave the setup, system will ask user:

- 1: Resume setup
- 2: Resume setup next time
- 3: Exit and Never Remind



Advanced Features

PIP/PBP/POP

PIP (Picture in Picture)



- Press **PIP/POP** key once to display picture in picture as left side.
- Press **Activate** Key to toggle focus on sub screen and press TV/ AV/ COMPONENT/ PC or channel selection to change the content of sub screen.
- Press **swap** to change the content between primary and sub screen.



When in PIP mode:

Press **position** key to select the location of sub picture sequent from Left-up → Right-up → Right-Down → Left-Down then go back to Left-up.



When in PIP mode:

Press **size** key to change sub screen size sequent from 25% → 37.5% → 50% then go back to 25%. Location point based on center of sub screen fixed at 1/4 length and width of display.

PBP (Picture by Picture)



Press **PIP/POP** Key twice to display picture by picture as left side.

Press **Activate** to toggle focus screen and press TV/ AV/ COMPONENT/ PC or channel selection to change the content of sub screen.

POP (Picture on Picture)



- Press **Size/Mode** Key to display this picture on picture mode as left side.
- Press **Activate** Key to toggle focus on sub screen and press TV/ AV/ COMPONENT/ PC or channel selection to change the content of sub screen.
- Press **swap** to change the content between primary and sub screen.



- Press **Size/Mode** Key to display this picture on picture mode as left side.
- Press **Activate** Key to toggle focus on sub screen and press TV/ AV/ COMPONENT/ PC or channel selection to change the content of sub screen.
- Press **swap** to change the content between primary and sub screen.

Acer Emowering Feature

Favorite Channel

Operation	Description
"e" press less than 1 second	Toggle switch TV program sequent according to favorite list. There are five slots in favorite list. Each slot stores one TV program.
"e" more than 2 seconds	a. When current program is not stored in favorite list, press "e" key more than 2 seconds stores the TV program information at the last of favorite list. If there is no empty slot in the favorite list, 1 st program will be wiped out and the new TV program is added at last of favorite list. Simply says, it's first in first out (FIFO). b. When current program is stored in favorite list, press "e" key more than 2 seconds will remove the program from the favorite list.

Scenario Mode

Operation	Description
"e" key	Toggle switch scenario mode sequent. Standard → Movie → Sport → Concert → Game → User _____

No matter OSD menu is on or off, user can directly switch the scenario mode. If OSD menu is on, switching scenario mode doesn't cause the menu off and user can see the related parameters directly on the menu.

Display Electrical

I and Functional Specifications

Input and Output Signals

This LCD TV shall have the ability to operate under following range with stable green color of LED indicated. Any signal outside of the limits (any combination) shall not cause any damage to the unit or driving source. The range of operation is:

- CVBS and Y/C
 - PAL (4.43 M , 50 Hz) B、 G、 D、 K、 H、 I, PAL (4.43 M , 60 Hz)
 - SECAM D、 K 、 L
 - NTSC (3.58 M), NTSC (4.43 M), Japan (50 Hz)
- TV Systems
 - PAL and SECAM system Receivable
 - Full frequency range From channel E2 (48.25 MHz) to channel E69 (855.25 MHz)
- YUV inputs
 - YCbCr (480i/576i)
 - YPbPr (480p/576p、 1080i、 720p)
- VGA and DVI-D inputs
 - Horizontal input frequency range: 30 KHz to 70 KHz
 - Vertical input frequency range: 56 Hz to 85 Hz
 - Max. Resolution: 1360 x 768
 - Down Scaling support: 1152 x 870 75 Hz
 - 1280 x 960 60 / 85 Hz
 - 1280 x 1024 60 / 75 / 85 Hz

The LED shall indicate green color and OSD will show “ **Out of Range** “ message within 5 seconds after signal is out of range or down scaling support from selected input.

This LCD TV shall catch signal sources from TV, AV1, AV2, AV3, AV4, AV5, VGA and DVI-D automatically during power up, which it is unnecessary to select inputs from OSD or hot keys.

The priority to catch signal sources shall be 1st) User selected source from hot key or OSD, 2nd) Last source used, 3rd) TV input (last power down channel), 4th) AV1 RGB input, 5th) AV1 S-video input, 6th) AV1 CVBS input, 7th) AV2 YUV/RGB input, 8th) AV2 S-video input, 9th) AV2 CVBS input, 10th) AV3 input (Set to be input from OSD), 11th) AV4 YUV input, 12th) AV4 S-video input, 13th) VGA input, 14th) DVI-D input. The LCD TV shall complete selection and show media on screen within 5 seconds (including Auto Adjust).

The LED shall indicate green color and OSD will show “ **No Signal** “ within 3 seconds while there is missing signal from selected input.

The LED shall indicate green color and OSD will show “ **No VGA Connection** “ within 5 seconds while VGA input is selected but has no connection on VGA port.

The LED shall indicate green color and OSD will show “ **Go Into Power Save** “ within 5 seconds after meet condition of power saving mode.

This LCD TV shall go into power saving state in 5 seconds later of showing “ **Go Into Power Save** “. The LED shall indicate amber color during power saving mode.

This LCD TV shall proceed Auto Adjust while VGA or DVI-D input is selected and 1) Power up, 2) Auto Adjust pressed from OSD, 3) Factory preset acted, 4) New mode is detected. Auto adjust shall be completed within 3 seconds.

The AV1 input supports RGB, S-video and CVBS video inputs. If the RGB, S-video and CVBS video inputs are connected with cables, the priority shall be 1st) RGB input, 2nd) S-video input, 3rd) CVBS video input.

The AV2 input supports YUV/RGB, S-video and CVBS video inputs. If the YUV/RGB, S-video and CVBS video inputs are connected with cables, the priority shall be 1st) YUV/RGB input, 2nd) S-video input, 3rd) CVBS video input.

The AV3 input support YUV.

The AV4 could be set either input or output from OSD. While it is set to be output, AV3 would carry CVBS signal and stereo audio out from TV tuner.

The AV5 input supports S-video

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the LCD TV for maintenance and troubleshooting.

To disassemble the TV, you need the following tools:

- ☐ Wrist grounding strap and conductive mat for preventing electrostatic discharge
- ☐ Small Philips screw driver
- ☐ Philips screwdriver
- ☐ Plastic flat head screw driver
- ☐ Tweezers

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

General Information

Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following:

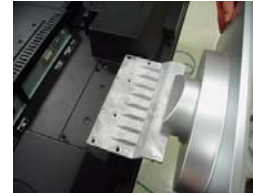
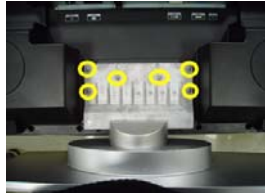
1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Remove the battery pack.

NOTE: There are several types of screws used to secure the product. The screws vary in length. Please refer the picture below, group the same type of screws together during service disassembling. Please also remember the screw location for each screw type. If you fasten the screw to the wrong location, the screw may be too long to damage the main board.

Disassembly Procedure

Removing the TV Stand Module

1. Remove the four screws securing the TV stand cover.
2. Remove the TV stand cover.
3. Remove the six screws securing the TV stand module.
4. Remove the TV stand module.



5. Remove the four screws securing the base.
6. Separate the base and the swivel assembly.



Removing the I/O and Media Box

1. Remove the two screws securing the I/O box.
2. Remove the I/O box.
3. Remove the two screws securing the media box.
4. Remove the media box.



Removing the Speakers

1. Remove the three screws securing left speaker.
2. Disconnect the left speaker cable.
3. Remove the left speaker.



4. Remove the three screws securing right speaker.

5. Disconnect the right speaker cable.
6. Remove the right speaker.



7. Remove the eight screws securing the speaker rear cover.
8. Remove the speaker rear cover.
9. Remove the four screws securing the speaker front cover.
10. Remove the speaker front cover.



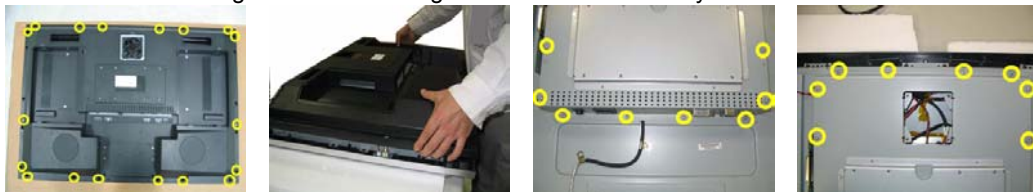
Removing the System Fan

1. Remove the four screws securing the fan cover.
2. Remove the fan cover.
3. Remove the system fan.



Removing the Wall Mount Assembly

1. Remove the sixteen screws securing the back cover.
2. Remove the back cover.
3. Remove the eight screws securing the wall mount assembly.
4. Remove another eight screws securing the wall mount assembly.



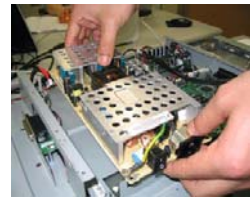
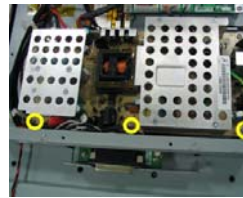
5. Remove the four screw nuts securing the wall mount as shown.

6. Lift the wall mount up and slide it out.



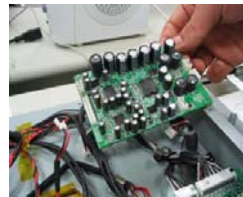
Removing the Power Board

1. Disconnect the cables from power board.
2. Remove the three screws securing the power board.
3. Remove the other three screws securing the power board.
4. Remove the power board.



Removing the Audio Board and the Main Board

1. Disconnect all cables connected to the audio board.
2. Remove the four screws securing the audio board.
3. Remove the audio board.



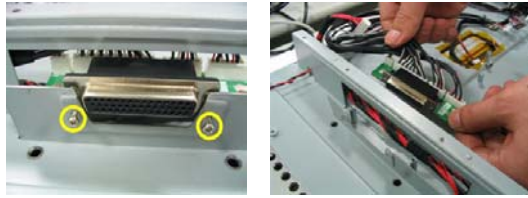
4. Remove the two screws securing the mainboard.
5. Remove the other four screws securing the mainboard.
6. Detach the main board from the unit.



Removing the Interface Board

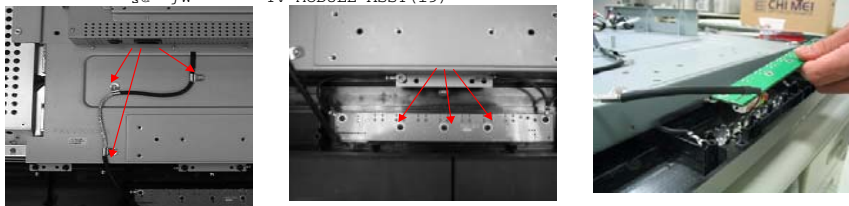
1. Remove the two screws securing the interface board.

2. Remove the interface board from the unit.

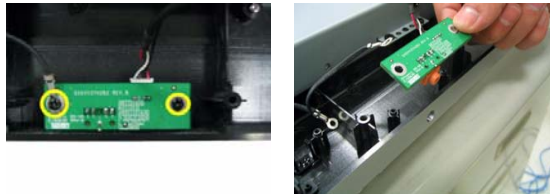


Removing the Button Board/Ear Phone Board/Speaker Board

1. Remove the three screws securing the button board wireclip.
2. Remove the three screws securing the button board.
3. Turn over the button and disconnect the cables connected to the button board and remove the button board.



4. Remove the two screws securing the ear phone board.
5. Remove the ear phone board.



6. Remove the two screws securing the left speaker board.
7. Remove the left speaker board cover.
8. Remove the speaker board.
9. Repeat the procedure for right speaker board.



Removing the LCD Module

Removing the Button Key/Power Lens/IR Lens

1. Remove the button key.
2. Remove the power lens.
3. Remove the IR lens.



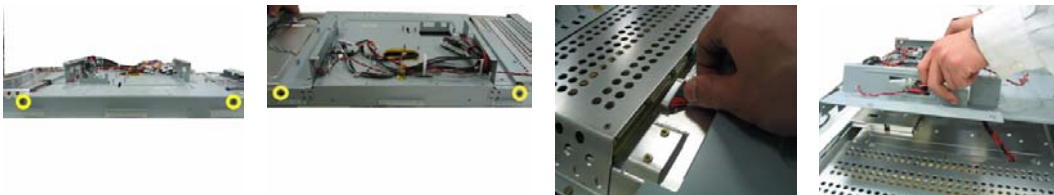
4. Remove the two screws securing the left LCD bracket.
5. Remove the two screws securing the right LCD bracket.



6. Remove the sixteen screws securing the LCD module.
7. Remove the LCD module from the unit.



8. Remove the two screws securing the chassis middle.
9. Remove the other screw securing the chassis middle.
10. Disconnect the cable.
11. Remove the chassis middle.



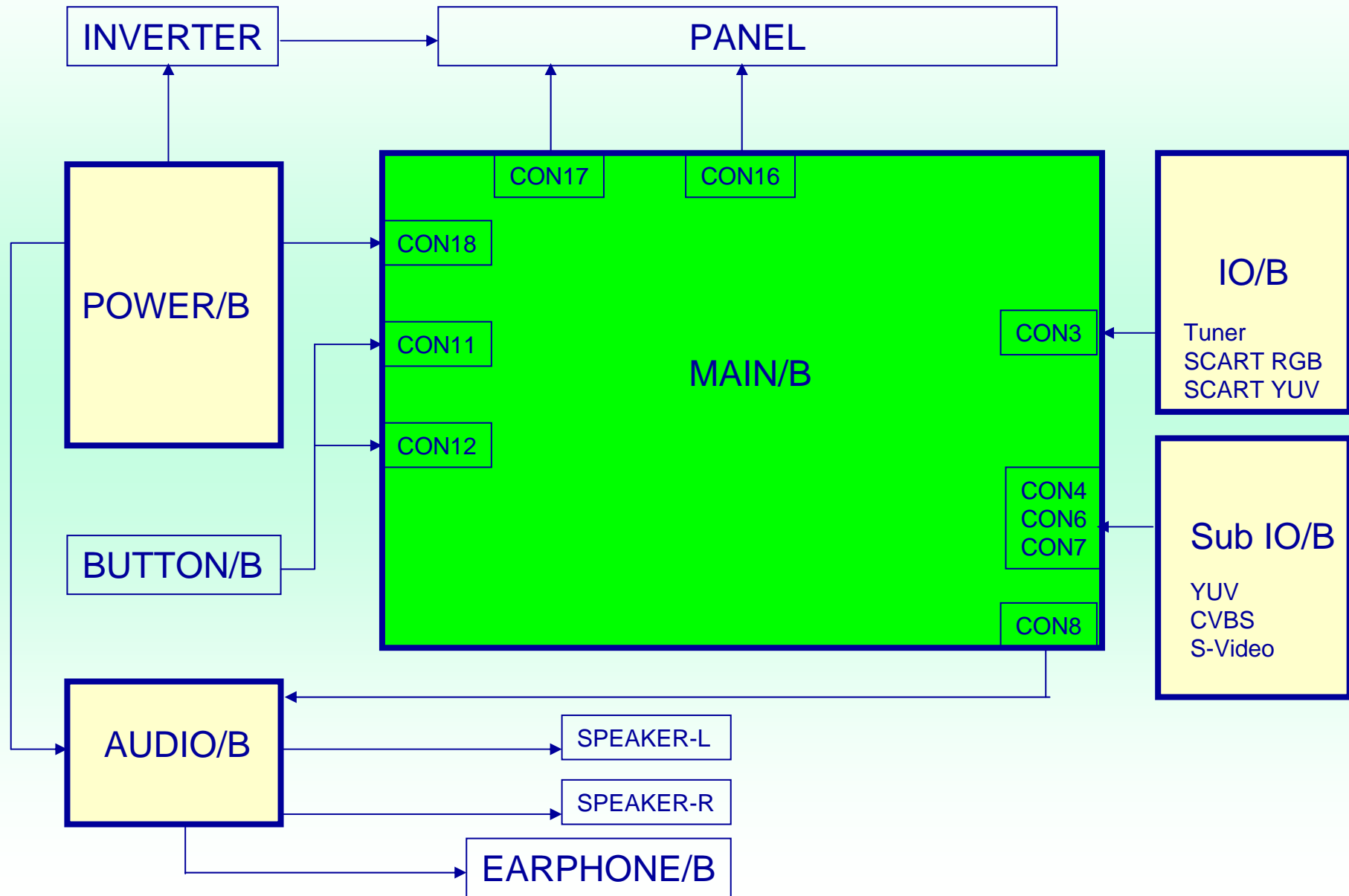
12. Remove the three screws securing the left and right LCD bracket.



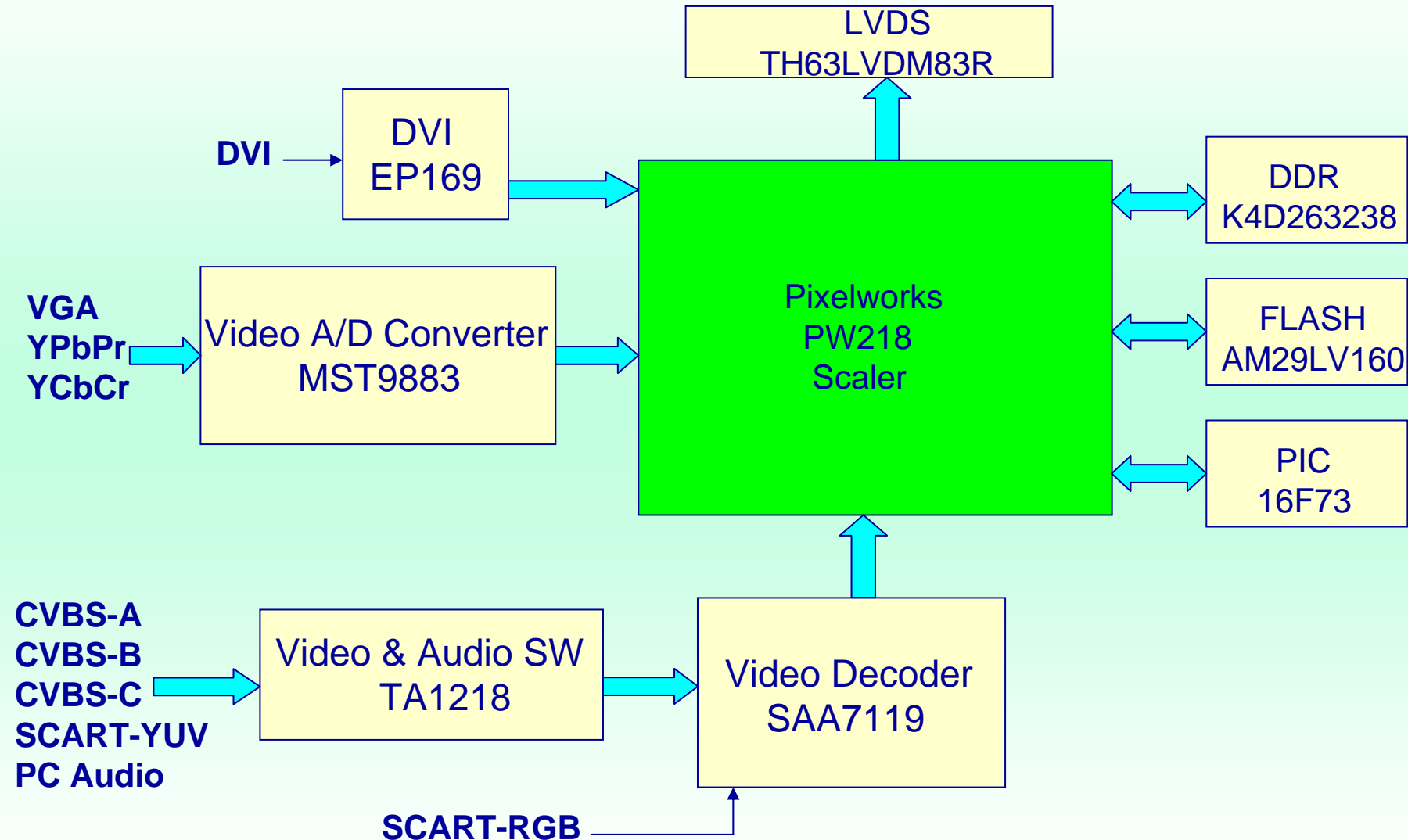
AT3201W

Troubleshooting Guideline

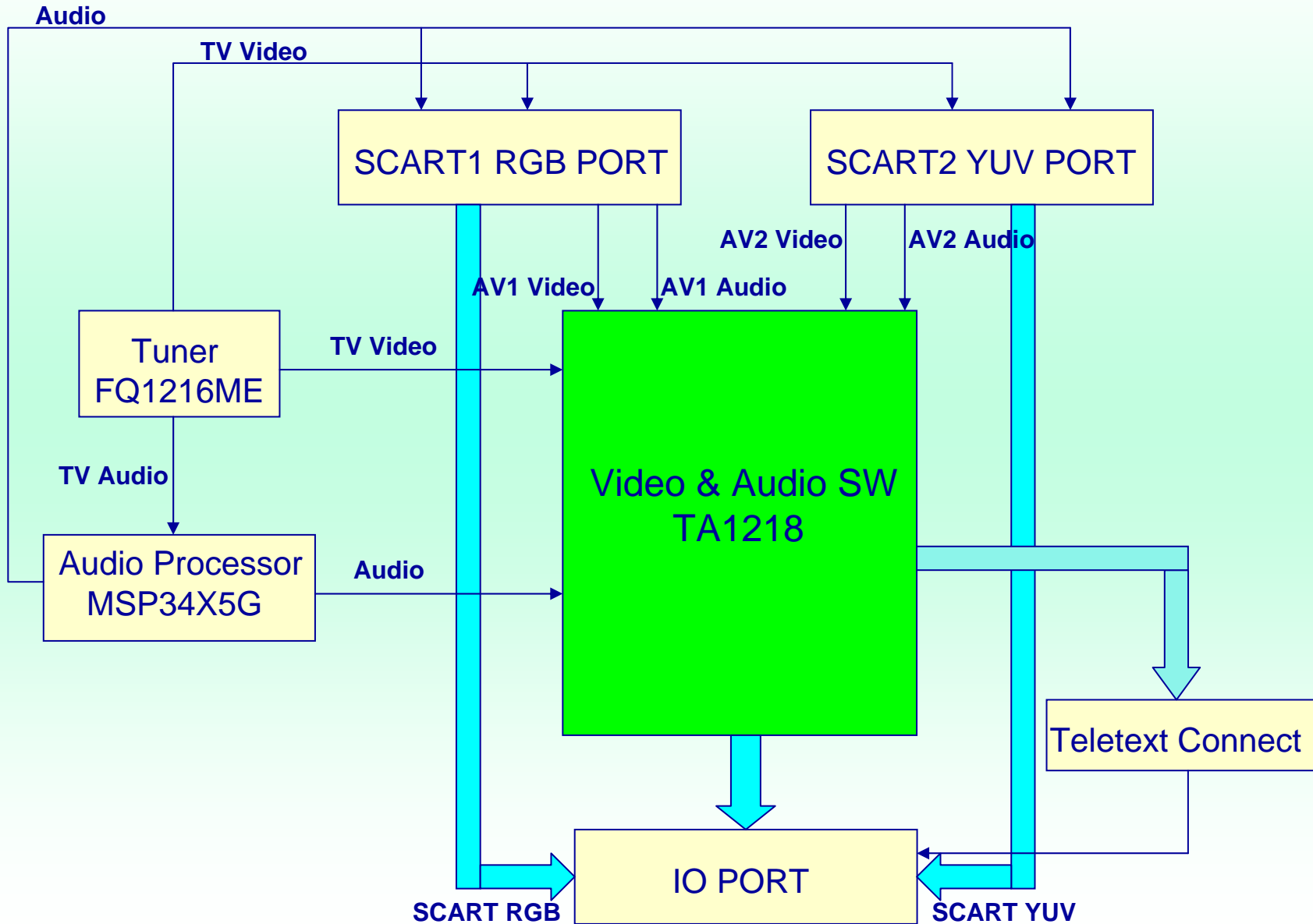
AT3201W System Block Diagram



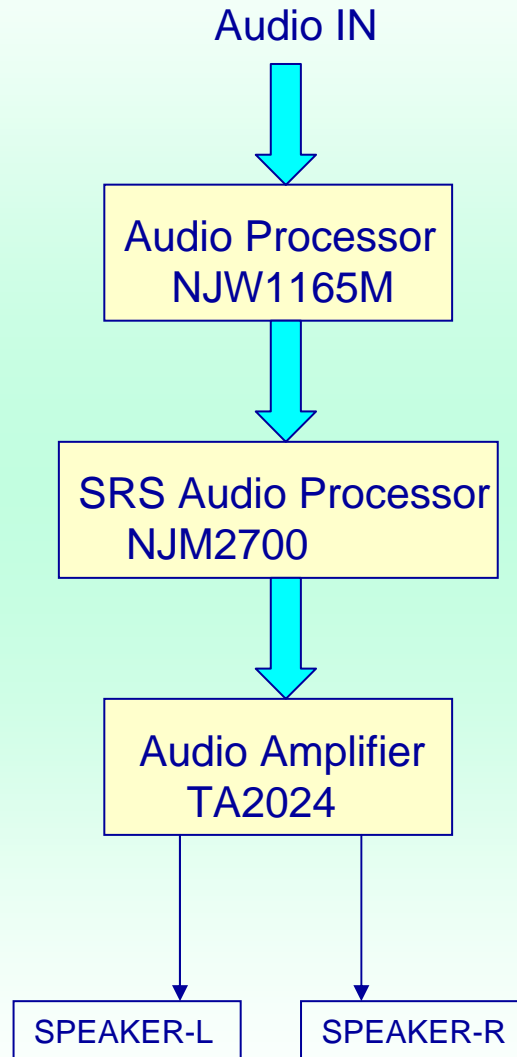
Main Board Block Diagram

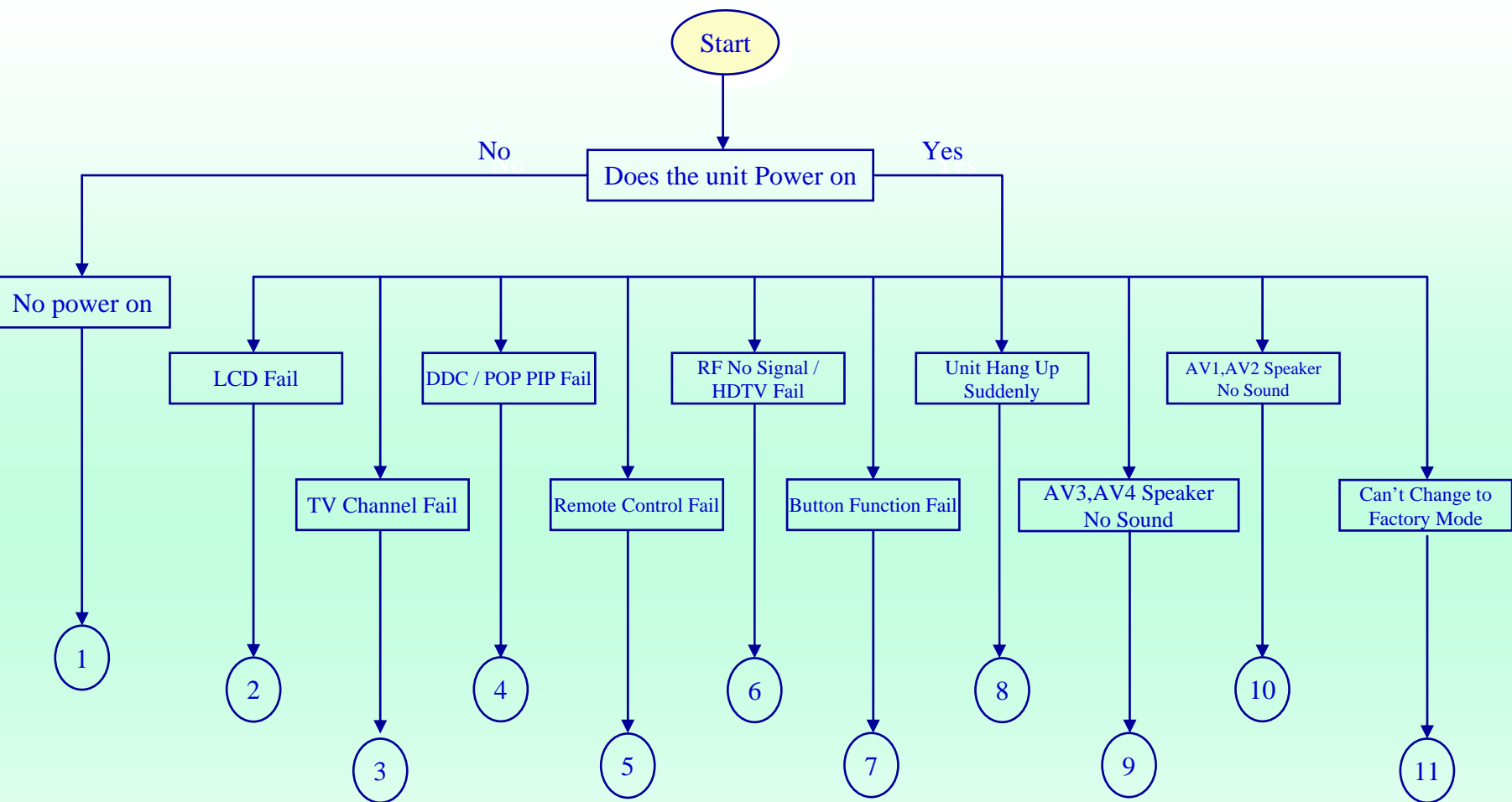


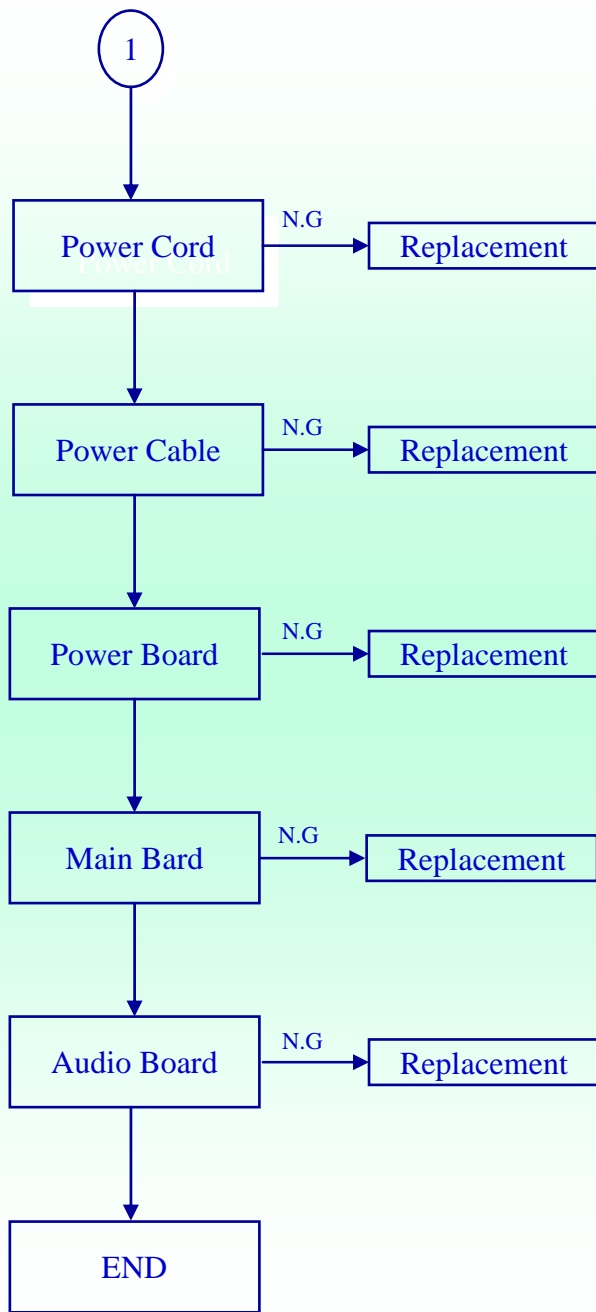
IO Board Block Diagram

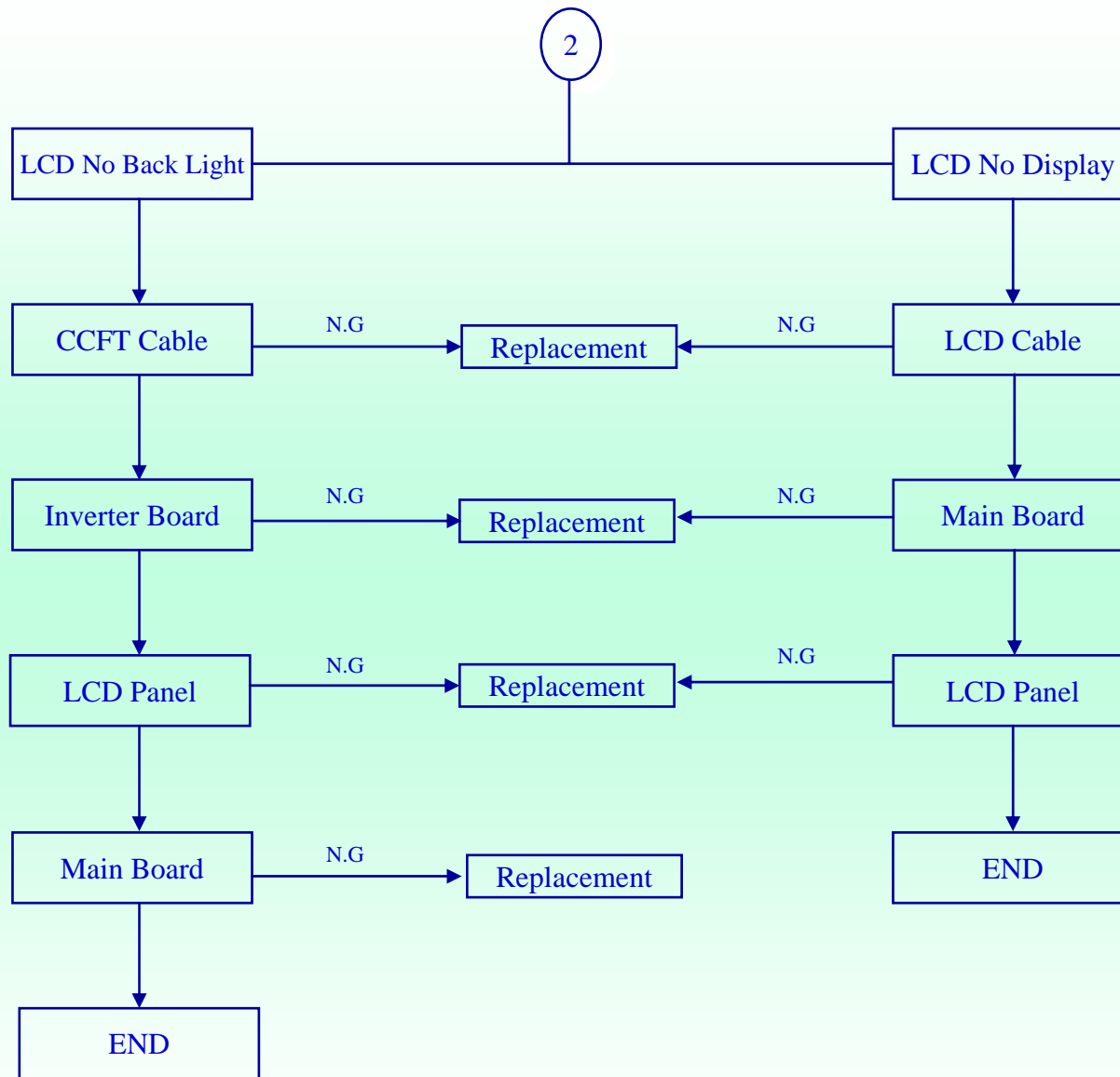


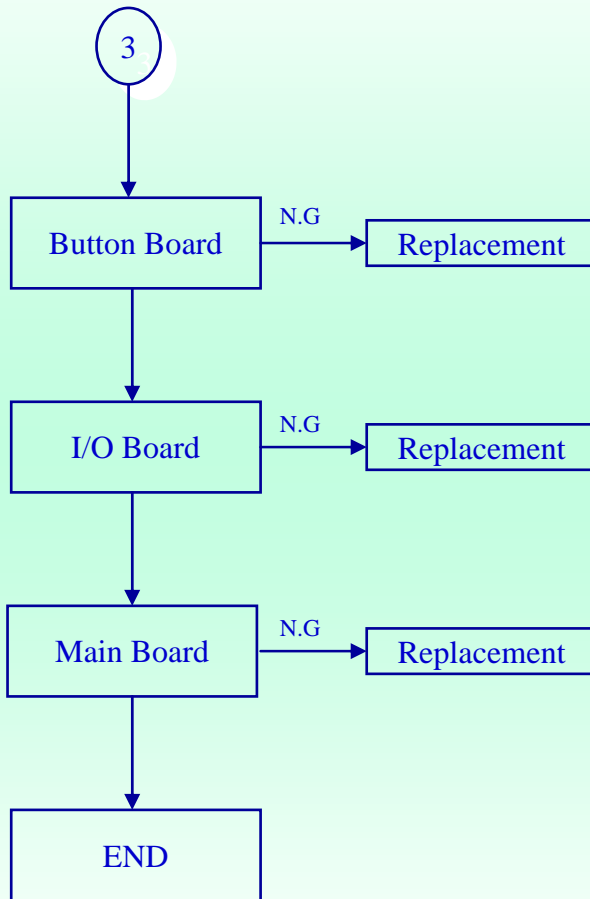
Audio Board Block Diagram

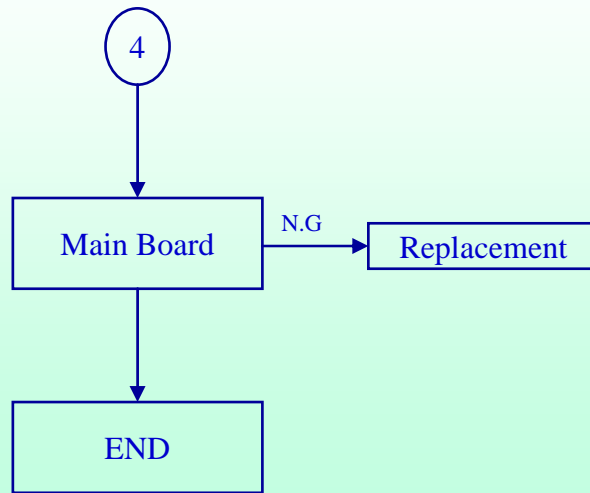


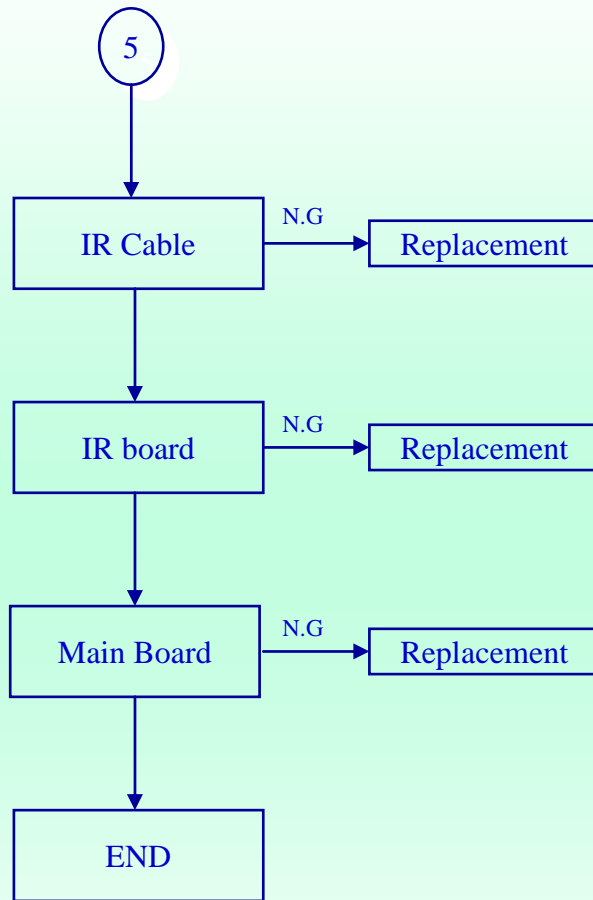


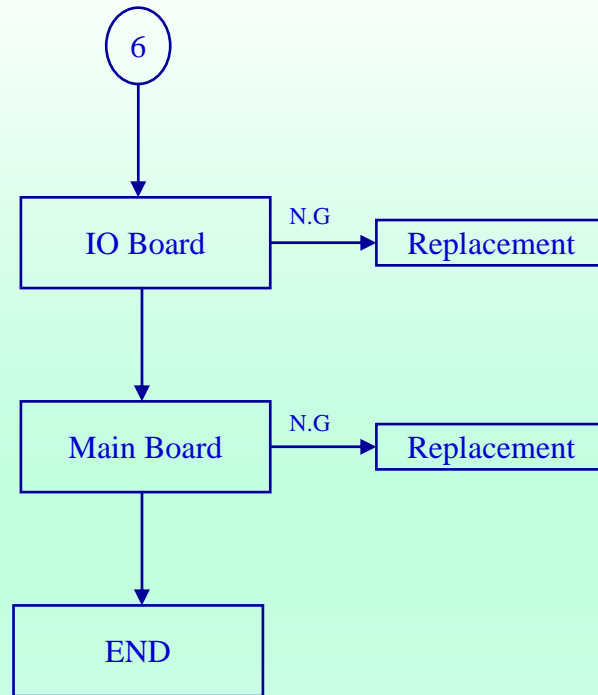


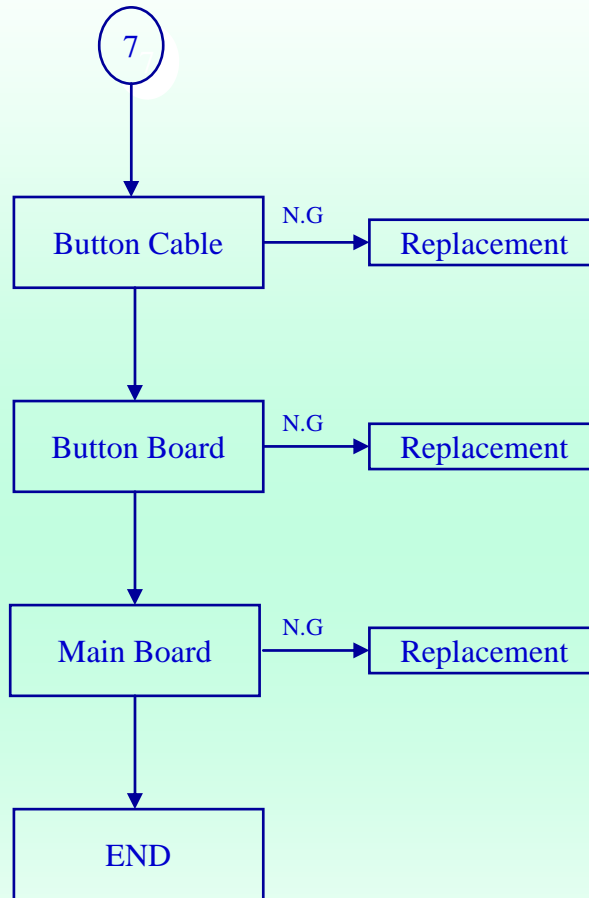


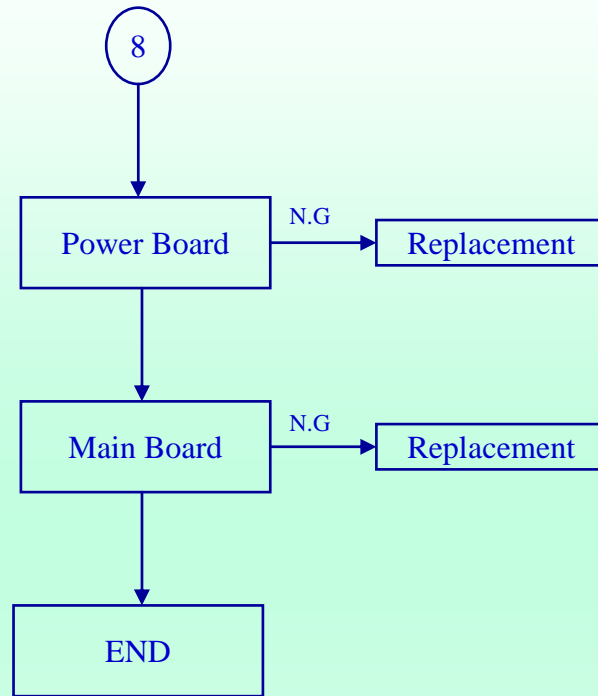


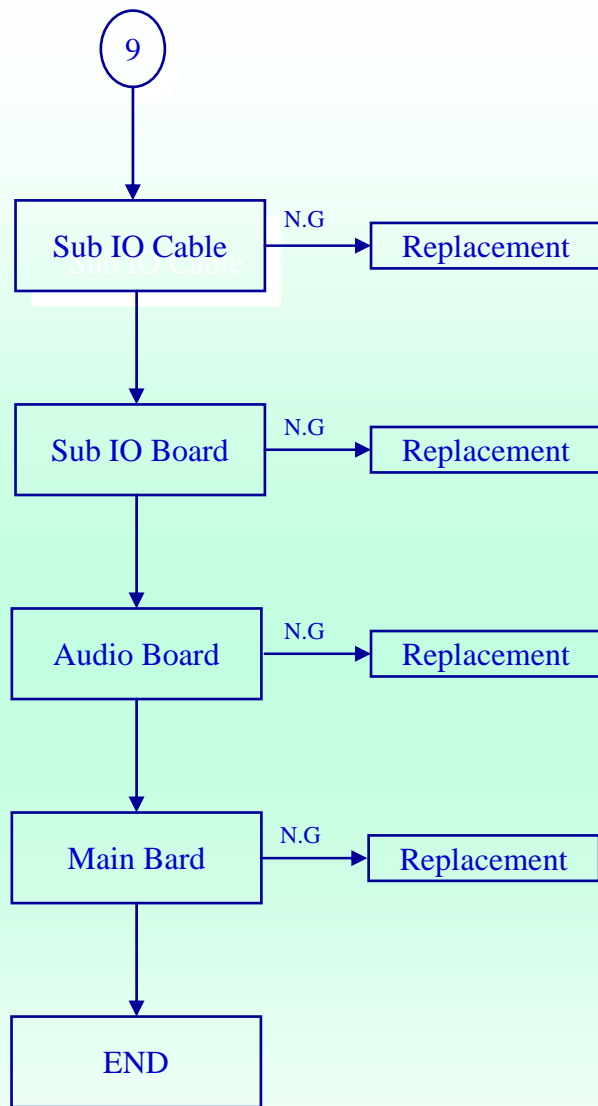


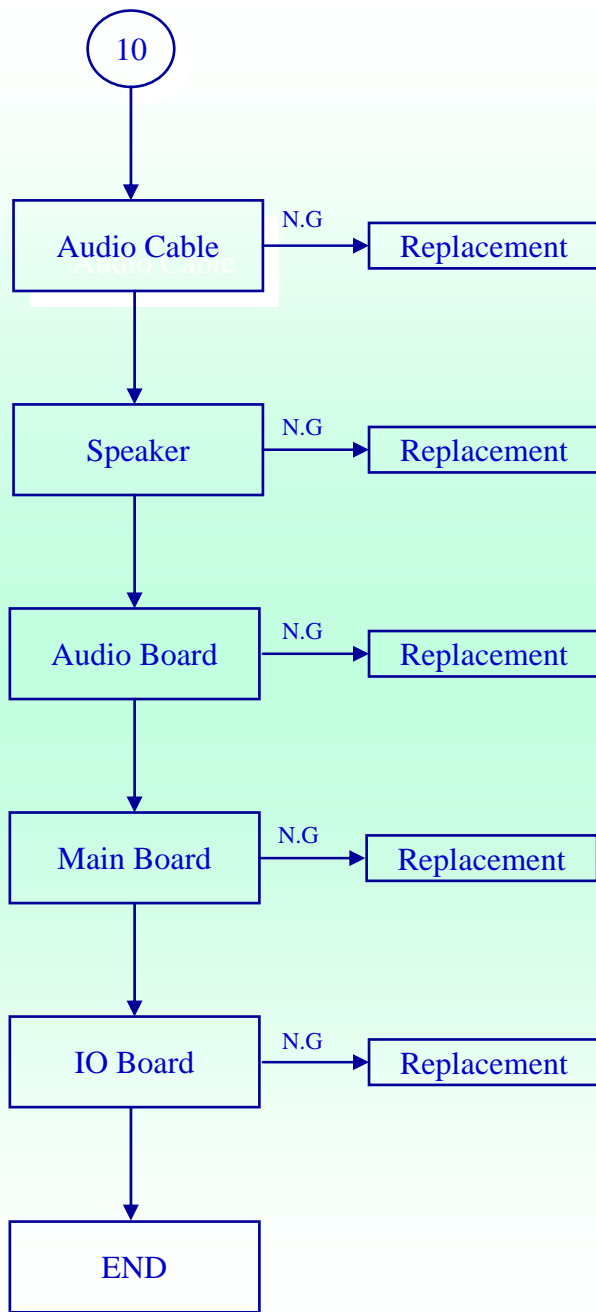


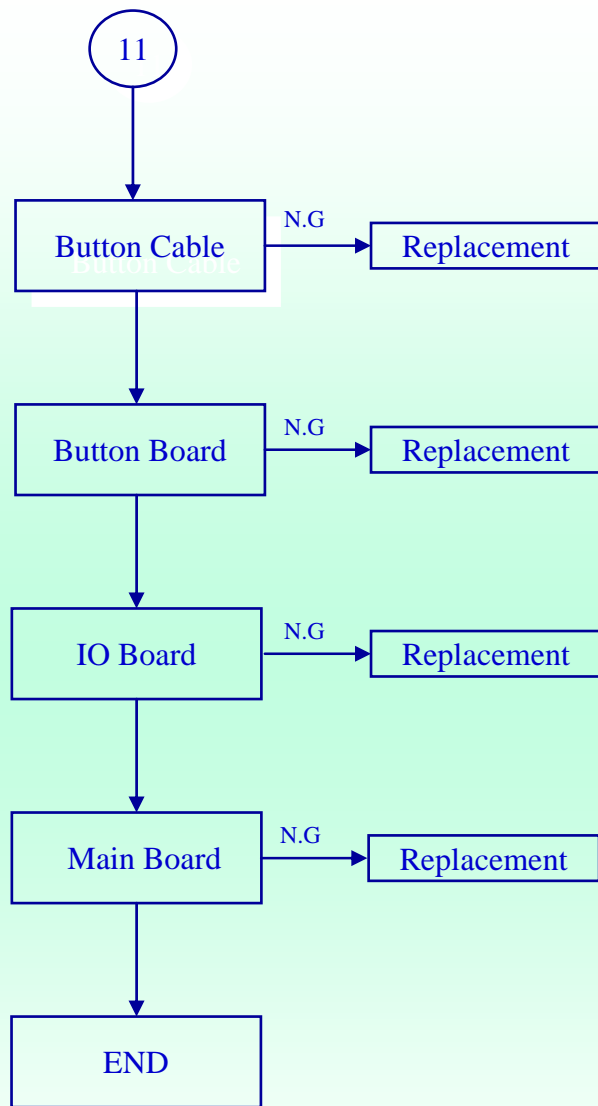












FRU (Field Replaceable Unit) List

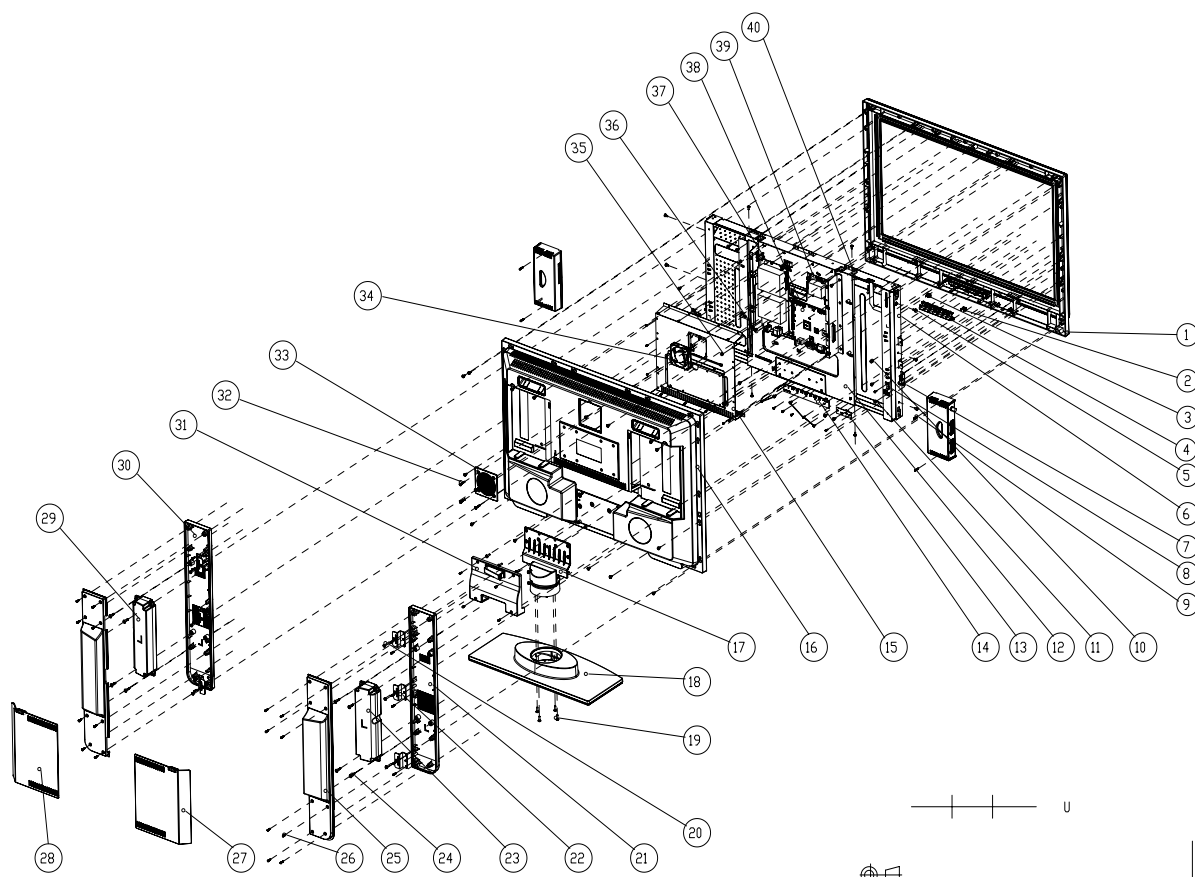
This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of LCD TV AT3201W. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

Exploded Diagram

VL-V10107K2



Number	Item
1	Front Cover Assy
2	IR Lens
3	Power Lens
4	Button Key
5	SCREW M4*10-B (BNI)
6	LCD BRACKET
7	SPEAKER BOARD
8	SPEAKER BOARD BRACKET
9	SCREW M3*16 P(NI)
10	SCREW T4*12-B(BLACK)
11	SCREW T3*8-P(BLACK)
12	LCD CHASSIS-M
13	EERPHONE BOARD
14	BUTTON BOARD
15	WALL MOUNT
16	BACK COVER ASSY

Number	Item
17	SWIVEL ASSY
18	STAND BASE ASSY
19	SCREW M4*15-B (NI+WASHER+SPRING)
20	SCREW T4*25-B(BNI)
21	SPEAKER BOX FRONT COVER -L
22	SPEAKER BOARD BRACKET
23	SPEAKER ASSY - L
24	SCREW 3 X 20.4-B (NI)
25	SPEAKER BOX BACK COVER -L
26	SCREW T3*12-B(BNI)
27	REAR COVER - L
28	REAR COVER - R
29	SPEAKER ASSY - R
30	SPEAKER BOX FRONT COVER -R
31	HINGE COVER
32	VB5 SCREW M3*22-B (BNI)
33	Fan Cover
34	FAN 12V
35	SCREW M3*5-P-NI-+
36	SCREW M4*6 P (NI) S/P
37	ADP/PWR BOARD W/MYLAR
38	MAINBOARD
39	AUDIO BOARD
40	LCD TFT AU 31.5 IN. T315XW01 V0

FRU List

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
Accessory			
		REMOTE CONTROL 80-10185 (EU)	25.M01V7.001
Boards			
		IO BOX MODULE	6M.M03V7.001
		TUNER MODULE - PAL	6M.M03V7.002
		ADP/PWR BOARD W/MYLAR	55.M03V7.001
		MAINBOARD	55.M03V7.002
		AUDIO BOARD	55.M03V7.002
		BUTTON BOARD	55.M03V7.004
		EERPHONE BOARD	55.M03V7.005
		INTERFACE BOARD	55.M03V7.006

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		SPEAKER BOARD	55.M03V7.007
Case/Cover/Bracket Assembly			
		SWIVEL ASSY	60.M03V7.001
		STAND BASE ASSY	60.M03V7.002
		HINGE COVER	42.M03V7.001
		REAR COVER - R	42.M03V7.002
		REAR COVER - L	42.M03V7.003
		BACK COVER ASSY	60.M03V7.003
		FRONT COVER AASY	60.M03V7.004
		WALL MOUNT	33.M03V7.001
		SPEAKER BOX BACK COVER -R	42.M03V7.004

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		SPEAKER BOX BACK COVER -L	42.M03V7.005
		SPEAKER BOX FRONT COVER -R	42.M03V7.006
		SPEAKER BOX FRONT COVER -L	42.M03V7.007
		SPEAKER BOX FRAME	33.M03V7.002
		SPEAKER BOARD BRACKET	33.M03V7.003
		LCD BRACKET	33.M03V7.004
		LCD CHASSIS-M	33.M03V7.005
		BUTTON KEY	42.M03V7.008
		FAN COVER	42.M03V7.009
		IR LENS	42.M03V7.010

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		POWER LENS	42.M03V7.011
		WIRE SADDLE CHA-4	42.M03V7.012
		WIRE SADDLE MWS-7	42.M03V7.013
		GASKET STICK	47.M03V7.001
Cables			
		POWER CODE ITALY 3P 1.8M	27.M03V7.001
		POWER CODE EU 3P 1.8M	27.M03V7.002
		POWER CODE UK 3P 1.8M	27.M03V7.003
		CABLE- MB TO AUDIO	50.M03V7.001
		CABLE- MB TO POWER	50.M03V7.002
		CABLE- EARPHONE	50.M03V7.003

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		CABLE- AUDIO TO POWER	50.M03V7.004
		CABLE- SWITCH CABLE	50.M03V7.005
		CABLE- BUTTON	50.M03V7.006
		CABLE- LINE OUT	50.M03V7.007
		CABLE- AV3	50.M03V7.008
		CABLE- BTM TO EARPHONE	50.M03V7.009
		CABLE- EMI GROUND	50.M03V7.010
		CABLE- FAN TO POWER	50.M03V7.011
		CABLE- SPEAKER - R	50.M03V7.012
		CABLE- SPEAKER - L	50.M03V7.013

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		CABLE- INVERTER	50.M03V7.014
		CABLE- VGA 1.8M BLACK	50.M03V7.015
		CABLE- MB TO LCD	50.M03V7.016
		CABLE- RCA RGB 1.8M BLACK	50.M03V7.017
		CABLE- VB1D PAL 1.8M BLACK	50.M03V7.018
		CABLE- SCART BLC AK	50.M03V7.019
		CABLE- RCA YWR 1.8M BLACK	50.M03V7.020
		CABLE- S LINE 1.8M BLACK	50.M03V7.021
LCD			
		LCD TFT AU 31.5 IN. T315XW01 V0	56.M03V7.001
Miscellaneous			
		PE BAG FOR PANEL	47.M03V7.001

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		PANEL CONTACT PAD	47.M03V7.002
Fan			
		FAN 12V	23.M03V7.001
Speaker			
		SPEAKER ASSY - R	23.M03V7.002
		SPEAKER ASSY - L	23.M03V7.003
Screws			
		SCREW M3*5-P-NI-+	86.M01V7.001
		SCREW 4-40 UNC P-NI	86.M01V7.009
		SCREW M3*16 P(NI)	86.M01V7.010
		VB5 SCREW M3*22-B (BNI)	86.M03V7.001
		SCREW M4*10-B (BNI)	86.M03V7.002

AT3201W FRU List

Picture	No.	Partname And Description	Part Number
		SCREW T3*8-P(BLACK)	86.M03V7.003
		SCREW T4*12-B(BLACK)	86.M03V7.004
		SCREW T4*25-B(BNI)	86.M03V7.005
		SCREW M4*15-B (NI+WASHER+SPRING)	86.M03V7.006
		SCREW 3 X 20.4-B (NI)	86.M03V7.007
		SCREW M4*6 P (NI) S/P	86.M03V7.008